



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Ref: EPR ER

PROGRESS POLLUTION REPORT #3
Superior Waste Rock
Superior, Mineral County, Montana

I. HEADING

Date: 10/31/02
From: Tien Nguyen, On-Scene Coordinator
Agency: EPA
Unit: Region VIII - Emergency Response Program
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Denver Colorado 80202
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To: Kevin Mould, EPA Headquarters
POLREP No.: #3
Site: Superior Waste Rock

II. BACKGROUND

Site Number: 08-ER
Party Conducting the Action: EPA
Response Authority: CERCLA
NPL Status: No
Action Memorandum Status: 08/02/02
Date Action Started: 08/20/02
Completion Date: TBD

III. SITE INFORMATION

A. Incident Category

Time Critical, Fund-Lead

B. Site Description

1. Site description

The Site covers the town of Superior, in Mineral County, Montana, where tailings reportedly have been used as a fill surface soil and contamination exists at local residences, **the town's right-of-ways, the county fairground**, and the Superior High School track. The Site is located down-stream from the Flat Creek drainage, along the banks of the Clark Fork River, and approximately 3.5 miles south of the Iron Mountain Mine and Mill. The waste rock/tailings reportedly are from the Iron Mountain Mine and Mill.



2. Site evaluation

See previous POLREPs for additional Site information.

On January 23, 2002, the Montana Department of Environmental Quality (MDEQ) requested EPA to evaluate the Superior High School track and Superior residential properties for a possible removal action. From the results, a Site Sampling Plan has been developed and from June 4 - 12, 2002 the EPA Region VIII Removal Program tasked START2 Contractor to collect surface and sub-surface soil samples for XRF on-site screening. A total of more than 650 samples were collected from nearly 100 residential properties.

XRF results show that several residential properties, the High School track, the County fairground, and the Town's right-of-way locations have elevated levels of lead and arsenic contamination. These levels are ranging from 500 ppm to 11,000 ppm for lead or from 100 ppm to 1,700 ppm for arsenic. Ten percent of these XRF soil samples were sent to the labs for analytical confirmation. Four of these samples were also run for Toxicity Characteristics Leaching Procedures (TCLP). Results indicated that all four samples failed TCLP for lead. These results ranged from 36 mg/l to 140 mg/l; the regulatory standard for lead is 5 mg/l. The four samples were collected from the high school track, the County fairground, the residences at 201 Spruce (along the fence line) and at 208 Main street (forest service home).

3. Description of threat

Arsenic and lead have been identified as the contaminants posing risks and hazards. See previous POLREPs for additional information.

IV. RESPONSE INFORMATION

A. Situation

1. Removal actions

See POLREP #2 for Previous Removal Activities at the Site.

After the excavated tailings and contaminated soils were staged at the Mineral County Airport ground since August 30, 2002, the EPA Removal program tasked the Army Corps of Engineers (COE) to: 1) identify an on-site process to treat the excavated tailings that failed TCLP, based on the results of the treatability study which had been conducted by an EPA/START contractor; 2) design a permanent repository at the airport ground to serve as landfill for the Site contaminated soils and treated tailings, and 3) assist the OSC in overseeing this Removal Action. .

On September 29, 2002, the OSC and COE personnel visited the Site and had a meeting with the Mineral County representative to gather more information, including specific requirements from the County Airport and the Federal Aviation Agency, for the repository design in building a landfill on airport ground (During the Removal start in August, the County Board had agreed in principle that EPA could use the airport ground to build a repository for the Site contaminated materials). The Montana DEQ was also contacted regarding its requirements for a landfill on this design.

On October 11, COE provided EPA with a potential process to treat the tailings and a design of a repository to landfill the treated wastes. The proposed repository would be approximately 100ft. x 400ft. (less than an acre of land) and would be located northeast of the airport, 2,100 ft. from the end of the runway. The design was sent to MDEQ and the Mineral County for comments.

On October 22, the EPA contractor, Environmental Restoration Inc. and its sub-contractor, Envirocon of Missoula, mobilized to the Site to start this phase of the Removal. Office trailer and removal equipment, including a plug mill for the solidification, were on Site on October 23.

From October 24 - 30, 2002, the following removal activities were accomplished:

- A cell of 100ft x 400ft and 4.5ft in depth was dug as specified in the design; it was designed as a repository for the treated waste and contaminated soil.
- Approximately 2,500 cubic yards of contaminated soil were removed from the staging area and placed in the cell.
- The plug mill was set up, calibrated, and test run by October 26. For three days from October 28 to 30, approximately 1096 tons of tailings were treated. Composite samples of treated materials were collected daily, and run for TCLP while awaiting analysis, before being placed into the repository cell.
- On October 30, ER began setting up the screener to screen selected materials (a design specification) for capping the cell.

2. Disposal

On October 30, 2002, a County representative provided the OSC with a copy of agreement among the County, the School District, and the Town of Superior (dated August 19, 2002) and a copy of letter from the County to FAA (dated October 29, 2002) which indicated that they had agreed to let EPA use the County airport ground as a permanent repository for the treated wastes.

3. State and Local Role

As a result of concern expressed by the community, the threats posed at the Superior Waste Rock Site and the inability of the State to fund removal of the potentially hazardous materials, the State requested assistance from EPA in undertaking a Removal Action. Staff members from MDEQ, Mineral County Health, School District, and the Town of Superior are working with EPA on a continuing basis. They will continue to be informed and involved.

4. Enforcement

The Agency has contacted the PRPs and issued a General Notice letter to them on August 21, 2002.

B. Future Plans

The removed tailings continue to be treated before being placed in the repository cell. The cell will be capped as designed.

V. COST INFORMATION

The estimated EPA costs for the first and second Phase of the Removal are \$550,000.